# May 19, 2004 - System Issues and Status

Table 1: Process Strategy/Geier as of 05/19/04 Active Requests in order of priority (1 of 5)

Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
PR 32-04		ValR11	GGEO (SS11)	11.1P5 11.1P6 11.1P7 11.1P8 11.2P2 11.4P1	3/00 - 6/03 every 3rd month	Done 5/3/04
PR 37-04	Aqua- FM3	Beta3	SSF (SS4.5-6)	4.5- 6.3P3 4.5- 6.2P2 4.5- 6.4P1	12/02	Done 5/6/04
PR 36-04	Aqua- FM3	Beta3	SFC (SS9)	9.2P1 9.3P1 9.4P1	12/02	Done 5/10/04
PR 31-04		Edition2A	GGEO (SS11)	11.1P5 11.1P6 11.1P7 11.1P8 11.2P2 11.4P1	1/01 - 12/01 3/00 - 12/00 1/02 - 2/03	HOLDING - waiting for ValR11 approval Approval expected week of 5/ 17.
PR 46-04 to 48-04	Aqua	ValR3	BDS (SS1)	1.1P5 1.2P1 1.3P3	3/21/04 12/15/02	After this pro- cesses, wait for e- mail before delet- ing and running any Edition1 data
PR 39-04 to 45-04	Terra	ValR3/ValR4	BDS/ ERBElike (SS1-3)	1.1P3 1.2P1 1.3P3 2.4P1 2.2P1 2.3P1 2.3P2 3.1P1	11/30/03 - 1/1/04	After this processes, wait for e-mail before deleting and running any Edition1 or Edition2 data
PR18-04	Terra	ValR1	SRBAVG (SS10)	10.1P1	3/00 - 2/03	HOLDING - wait- ing for delivery. Delivery date unknown at this time

Table 1: Process Strategy/Geier as of 05/19/04 Active Requests in order of priority (2 of 5)

Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
PR17-04	Terra	Edition2A	SRBAVG (SS10)	10.1P1	3/00- 2/03	HOLDING - ValR1 must be approved before this starts
M PR 2-04		GEOS4	MOA (SS12)	12.1P1	3/04 - present	standing request to process data as it arrives
M PR ■1-04		GEOS4	PMOA (SS9.1)	9.1P1	2/04 - present	
PR 55-04	Terra	Beta2	TSI (SS7.1)	7.1.1P1	5 months	HOLDING - wait- ing for delivery. 5/ 21/04 delivery scheduled
PR 97-03	Terra	Edition2-QC	SSF (SS4)	4.1- 4.1P2 4.1- 4.2P1 4.1- 4.2P2 4.1- 4.3P1	1/03- 2/03	Done 5/9/04
PR 10-04, 11-04	Terra Edition2A		SSF (SS4.5-6)	4.5- 6.1P2 4.5- 6.2P2 4.5- 6.4P1	1/03 - 2/03	Done 5/9/04
PR 9-04	Terra	Edition2A	SFC (SS9)	9.2P1 9.3P1 9.4P1	1/03 - 2/03	Done 5/10/04
PR13-04	Aqua- FM3	Beta3	SRBAVG (SS10)	10.1P1	12/02	HOLDING - wait- ing for delivery. 5/21/04 delivery schedule

Table 1: Process Strategy/Geier as of 05/19/04 Active Requests in order of priority (3 of 5)

Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
standing requests AM- PR 1-00 to 7- 00	Terra	Edition1	BDS/ ERBElike (SS1-3)	1.1P3 1.2P1 1.3P1 1.3P2 2.1P1 2.2P1 2.3P1 2.3P2 3.1P1 3.2P2	for 3/04 - present	Holding - waiting on ValR3/4 approval  DO NOT PRO-CESS 3.2P2 - it is on hold  Need to reprocess 3/04 which contained errors and was deleted from the archive
standing requests AM- PR 8A-02 to 11-02	Terra	Edition2	BDS/ ERBElike (SS1-3)	1.2P1 1.3P3 2.2P1 2.3P1 2.3P2 2.4P1 3.1P1 3.2P2	for 7/03 - present	Holding - waiting on ValR3/4 approval  DO NOT PRO-CESS 3.2P2 - it is on hold
standing requests PM- PR 7-03A to 10-03	Aqua	Edition1	BDS/ ERBElike (SS1-3)	1.1P5 1.2P1 1.3P1 1.3P2 2.2P1 2.3P1 2.3P2 3.1P1 3.2P2	for 3/04 - present	Holding - waiting on ValR3/4 approval  PLEASE create IES in addition to BDS for 4/04 ONLY.  DO NOT PROCESS 3.2P2 - it is on hold  Need to reprocess 3/04 which contained errors and was deleted from the archive

Table 1: Process Strategy/Geier as of 05/19/04 Active Requests in order of priority (4 of 5)

Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
standing requests PM- PR 11-03, 13- 03 to 17-03	Aqua	Edition2	BDS/ ERBElike (SS1-3)	1.3P3 1.2P1 2.2P1 2.3P1 2.3P2 2.4P1 3.1P1 3.2P2	for 7/03 - present	HOLDING - waiting for Aqua Gains and SRF to be delivered and associated ValR4 to run DO NOT PROCESS 3.2P2 - it is on hold
standing request PM- PR 12-03	Aqua/ Terra	Edition2	dition2 ES4/ES9 3.2P1 for 7/03 - present		HOLDING - waiting for both Terra and Aqua to have processed Edition2 data beyond 6/03.	
M-PR 3-02		NSIDC- NESDIS	EICE ESNOW (SS4.1)	4.1- 4.0P1	standing request	
PR 97-03	Terra	Edition2-QC	SSF (SS4)	4.1- 4.1P2 4.1- 4.2P1 4.1- 4.2P2 4.1- 4.3P1	3/03 - 12/03	
PR 10-04, 11-04	Terra	Edition2A	SSF (SS4.5-6)	4.5- 6.1P2 4.5- 6.2P2 4.5- 6.4P1	3/03 - 12/03	
PR 9-04	Terra	Edition2A	SFC (SS9)	9.2P1 9.3P1 9.4P1	3/03 - 12/03	

Table 1: Process Strategy/Geier as of 05/19/04 Active Requests in order of priority (5 of 5)

Production Request (PR)	Satellite	Production Strategy	Data Product (SS#)	PGEs	Data Dates	Special Status
PR 53-04, 54- 04	Aqua- FM4	BetaGERB	SSF (SS4)	4.1- 4.1P3 4.1- 4.2P1 4.1- 4.2P2 4.1- 4.3P1 4.5- 6.1P3 4.5- 6.2P2	4/04	HOLDING - waiting on Edition1 IES created for 4/ 04 as input.
PR 52-04	Aqua- FM4	BetaGERB	SFC (SS9)	9.2P1 9.3P1 9.4P1	4/04	HOLDING - wait- ing on BetaGERB SSF
PR 116-03	TRMM	Beta3	TSI (SS7.1)	7.1.1P1	1/98 - 8/98 3/00	5/21/04 delivery

Table 2: Process Strategy/Geier as of 05/19/04 Coming Soon (1 of 2)

Active Month	Satellite	Processing Strategy	Data Product (SS#)	Data Dates	Comments
6/04	Aqua	ValR1	SSF(SS4)	7/02 - 12/02	Cloud delivery 5/28/04
	Aqua	ValR1	SFC(SS9)	7/02, 12/02	delivery 6/4/04
	Aqua	Edition1A	SSF(SS4)	first 12 months	
	Aqua	Edition1A	SFC(SS9)	first 12 months	
	Aqua	ValR4	BDS/ERBE- like(SS1-3)	1 month	verify newly delivered gains and spectral response functions
	Terra	Beta2	Synoptic SARB (SS7.2)	3/00, 4/00, 1/01, 7/01, 10/01	6/18/04 delivery
	TRMM	Beta3	Synoptic SARB (SS7.2)	9 mo	6/18/04 delivery - lower priority than TRMM
7/04	Terra	Edition2B	SSF (SS4.5-6)	50 months	updated ADMs, code correction, correct clear area coverage as needed (50-60 deg lat), new cloud classification parameter; delivery expected 6/18/04
	Terra	Edition2B	CRS(SS5)	50 months	delivery expected 5/28/04
	Terra	Edition2B	SFC (SS9)	50 months	6/4/04 delivery
	Terra	Edition2B	FSW(SS6)	50 months	assuming no delivery needed
	Aqua	Edition1A	SRBAVG (SS10)	7/02 - 6/03	unknown delivery date; requires GGEO for 3/03 - 6/03 which has never been processed
8/04	Terra	ValR4	BDS/ERBE- like(SS1-3)	1 month	verify newly delivered gains and spectral response functions
		ValR11	GGEO (SS11)	4 months	3/03 - 6/03; requires redelivery to handle GOES-9 and GOES-12; requires coefficients
		Edition2A	GGEO (SS11)	4 months	3/03 - 6/03; ValR11 must be approved
	Aqua	Beta1	CRS(SS5)	first 12 months	July delivery ??
	Aqua	Beta1	FSW (SS6)	first 12 months	test at SCF to verify no redelivery needed

Table 2: Process Strategy/Geier as of 05/19/04 Coming Soon (2 of 2)

Active Month	Satellite	Processing Strategy	Data Product (SS#)	Data Dates	Comments
	TRMM	Beta3	SYN/AVG/ ZAVG (SS8)	9 mo	7/23/04 delivery
	Terra	Beta2	SYN/AVG/ ZAVG (SS8)	3/00, 4/00, 1/01, 7/01, 10/01	7/23/04 delivery
9/04	Aqua	Edition1A	SSF(SS4)	second 12 months	
	Aqua	Edition1A	SFC(SS9)	second 12 months	
	Terra	Edition2B	SRBAVG (SS10)	50 months	
10/04		ValR11	GGEO (SS11)	? months	7/03 - 6/04; requires coefficients
		Edition2A	GGEO (SS11)	7/03 - 6/04	
	TRMM	Beta4	Synoptic SARB (SS7.2)	9 months	
	Terra	Beta3	Synoptic SARB (SS7.2)	12 months	
11/04	TRMM	Beta4	SYN/AVG/ ZAVG (SS8)	9 months	
	Terra	Beta3	SYN/AVG/ ZAVG (SS8)	12 months	
	Aqua	Beta3	SRBAVG (SS10)	7/03 - 6/04	
	Aqua	Beta1	TSI (SS7.1)		Not on Bruce's schedule
	Aqua	Beta1	Synoptic SARB (SS7.2)		Not on Bruce's schedule
	Aqua	Beta1	SYN/AVG/ ZAVG (SS8)		Not on Bruce's schedule

Table 3: May 19, 2004 - System Issues and Status

Activity	Lead	Status
СМ	Ayers	• See Table 4 for SCCR activity since the last DMT meeting. SCCRs that need to be reviewed follow Table 4. (Ayers)
		• Released the Instantaneous SARB delta delivery to the ASDC (SCCR 526). (Saunders)
		• Provided delivery statistics and other information to Erika Geier for her presentation at the CERES/ASDC workshop. (Ayers)
		• Met with the SEC, subsystem leads, and ASDC personnel to discuss the migration from HDF4 to HDF5. (Ayers)
		Attended the CERES/ASDC workshop. (Ayers)

Table 4: SCCR Activity May 5 at 12:00pm - May 17 at 12:00pm

SCCR	S	U	A	С	D	SS	Page No.	Comments
515				X		5		
518				X		11		
524				X		1		
525			X			CERESlib		
526	X		X	X		5	9	
527	X	X				7.1	10	

S=Submitted; U=Updated; A=Approved; C=Closed; D=Disapproved; SS=Subsystem

# **CERES Software Configuration Change Request Submittal**

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Subsystem: SARB SCCR Date & TIME: 2004-05-10 10:18:11 SCCR No.: 526

Description of Change (Science):

None

Reason for Change (Science):

None

Description of Change (non-Science):

Corrections to CC codes in PCF generator for PGE 5.3P1.

Reason for Change (non-Science):

An incorrect CC code number was being assigned to the output files.

Affected PGEs : CER5.3P1

Est. Time to Complete Changes: 2 hours Planned Delivery Date : May 10, 2004

Impact : None

Originator: CALDWELL, THOMAS E. (SAIC)

# **CERES Software Configuration Change Request Submittal**

Subsystem: TISAavg7.1 SCCR Date: 05/11/2004 SCCR Number: 527

#### Description of Change (Science):

Include the latest updated GGEO interpolated TOA flux subroutine. Add the log optical depths from GGEO data.

# Reason for Change (Science):

Subsystem 10 and Subsystem 7.1 share the same interpolated algorithm. Log optical depths from GGEO data was requested by scientist.

# Description of Change (non-Science):

Change the output TSI from un-nested to nested grid.

#### Reason for Change (non-Science):

To make the size of the files smaller.

Affected PGEs :CER7.1.1P1

Est. Time to Complete Changes: 2 weeks Planned Delivery Date : May 14, 2004

**Impact** : Subsystem 7.2

Date: 05/11/2004 Status: SUBMITTED

Originator: NGUYEN, CATHY (SAIC)

#### ADDITIONAL CHANGES TO SCCR NO. 527:

# Description of Change (Science):

- 1. Include the latest updated GGEO interpolated TOA flux subroutine.
- 2. Add the log optical depths from GGEO data.
- 3. Add a data type flag for the TOA fluxes.

#### Reason for Change (Science):

- 1. Subsystem 10 and Subsystem 7.1 share the same interpolated algorithm.
- 2. Log optical depths from GGEO data was requested by the scientists.
- 3. As requested by the scientists to help identifying whether the LW and SW TOA fluxes are CERES, GGEO or interpolated data.

# Description of Change (non-Science):

1. Change the output TSI from un-nested to nested grid.

Reason for Change (non-Science):

1. To reduce the sizes of the TSI zonal files.

Affected PGEs : CER7.1.1P1

Est. Time to Complete Changes: 2 weeks Planned Delivery Date : May 14, 2004

: Subsystem 7.2 Impact

Date & Time: 2004-05-11 12:51:52

Originator: NGUYEN, CATHY (SAIC)

Table 5: May 19, 2004 - Subsystem Issues and Status (1 of 5)

SS No.	SS Lead	Status	Problems
1.0	Cooper	Continued tracking receipt of Aqua and Terra data at ASDC. (Cooper, Snyder)	
		Verifying ValR3 & ValR4 runs. (Cooper)	
		• Running data for Aqua gain and SRF updates at the SCF. Updated gains expected to be delivered in early June. (Cooper)	
2.0	Walikainen	Continuing to examine the production email generated by the QC checker software. (Walikainen)	
		Continuing to inspect ERBE-like Aqua and Terra output plots and QC reports on the Web.  (Walikainen)	
		Generating Edition Comparison plots for each instrument. (Walikainen)	
		Posted downloadable Spectral Response Functions.     (Walikainen)	
		Testing new compiler and operating system continues. (Walikainen)	
3.0	Walikainen	Combined with above.	

Table 5: May 19, 2004 - Subsystem Issues and Status (2 of 5)

SS No.	SS Lead	Status	Problems
4.1	Sun-Mack	Processed QC global images and statistics for Terra MODIS Edition2-QC data for February and March 2003. Processed zonal seasonal results for Winter of 2003 for Terra MODIS Edition2-QC datasets. Posted results on the web. (R.Brown)	
		Processed CloudVis images for Terra MODIS Edition2-QC for Marie Byrd Land region from March 2000 through March 2001. Also processed CloudVis images for TRMM VIRS Edition2 data for the Bermuda region through August 1999. (R.Brown)	
		Continue working on matching Aqua-MODIS granules with two airplanes tracks: Citation and ER-2 during Atlantic THORpex Regional Campaign. IBM dx matching tool of a visualization package created, modified and improved. Generated the flight track matched tables from the Aqua-MODIS results for each matched pair. (Gibson, Chen, Sun-Mack)	
		• Studied 1.6um cloud retrieval versus 3.7um cloud retrieval. The two algorithms were run with Aqua-MODIS and the cloud property results were produced and posted on the web. Communicated with Pat Minnis through the study. (Sun-Mack)	
4.2	Sun-Mack	Combined with above.	
4.3	Sun-Mack	Combined with above.	
4.4	Miller	Responded to questions on ADMGEO over permanent snow. A change to set the imager value to 1 over permanent snow was proposed to the Science Working Group Chairs. Also, a new name, "Snow/ice percent coverage clear-sky overhead-sun vis albedo", was selected. (Miller)	
		• Monitored Terra Edition2-QC processing. Twenty-six, 26, 36, and 6 hours failed for January, February, March, and April 2004 respectively. All hours in January, four in February, 8 in March, and one in April had missing or failed IESs. All other hours were related to MODIS imager problems. Four of these hours had bad view zenith angles in the data. (Miller)	

Table 5: May 19, 2004 - Subsystem Issues and Status (3 of 5)

SS No.	SS Lead	Status	Problems
4.5	Nolan	Initiated work to convert Norman Loeb's Edition2B     SW Flux modules to work with Inversion PGE,     CER4.5-6.3P2. (Hoppe)	
		Prepared information on Inversion PGEs and changes that will be needed for NPOESS processing. Met with Mike, Erika and John to go over this information. (Nolan and Hoppe)	
		Attended NAV workshop on May 12-13. (Nolan)	
		Continued work to convert Norman Loeb's Edition2B LW and WN flux modules to work with Inversion PGE, CER4.5-6.3P2. (Nolan)	
4.6	Nolan	Combined with above.	
5.0	Coleman	Correcting issues in CER5.3P1 uncovered during SSI&T for CER5.4P1. (Caldwell)	
		Implementing last changes for Terra Edition2B CRS delivery and preparing to produce test data for SARB Working Group to review. (Caldwell)	
		• Investigating what modifications, if any, are needed to resurrect the ability to only process CRS data over the validation regions. Previously, we did one or the other (full-hour or subset only), and now we do both. Tom Charlock may want this ability at the SCF this summer. (Coleman)	
7.2	Coleman	Reading in latest version of TSIB files and verifying that the interface, with a new TSIB flag and now on the CERES nested grid, is working. (Zentz)	
		Working with Fred Rose to incorporate latest version of Fu-Liou model. (Caldwell, Zentz)	
12.0	Coleman	No new updates.	
7.1	Nguyen	Preparing for the delivery. (Nguyen)	
		Modified the cloud retrieval code to handle the missing cloud top pressures and optical depths. (Nguyen)	
		Sent the updated TSI code to Joe Stassi for input in CERESLIB. (Nguyen)	

Table 5: May 19, 2004 - Subsystem Issues and Status (4 of 5)

SS No.	SS Lead	Status	Problems
8.0	Nguyen	No new updates.	
10.0	Nguyen	Incorporated new GGEO interpolation code from Doelling. Ran March 2000 and July 2001 with different cases for validation. (Nguyen)	
6.0	Raju	Processed three days of December 2000 FM1 data with modified code at SCF to create binary files for TISA Averaging subsystem testing. (Raju)	
9.0	Raju	<ul><li>Preparing for subsystem delivery. (Raju)</li><li>Attended HDF5 meeting. (Raju)</li></ul>	

Table 5: May 19, 2004 - Subsystem Issues and Status (5 of 5)

SS No.	SS Lead	Status	Problems
11.0	Stassi	• Sent list of actual data collection times (approximate) for geostationary satellites to Lin Chambers. Also sent information about the data longitude range, and the scan pattern and scan duration for each satellite. (Stassi)	
		• Reviewed the GGEO Web plots for the ValR11 processing months. The only significant problem found was that there were no GMS-5 data for September 2000 after day 3. Examined the input data headers for days after day 3, and found that they reported the data to be from October instead of September. This was reported to Lisa Link, who will attempt to have the September data reordered. (Stassi)	
		Dave Young and Dennis Keyes found that some of the averages in the ValR11 production processing runs changed more than was expected based on earlier SCF runs. I ran comparison tests on the March 2000 and December 2002 data against runs made at the SCF prior to delivery. These tests indicated that the production code was delivered correctly. Tests by Dennis found that the differences could be explained by the correction to the clearsky map algorithm. (Stassi)	
		• Ran the GGEO calibration sensitivity tests for the July 2001 data. The whole month was run twice, once with the values in the calibration table reduced by 5% and once with the values increased by 5%. Dave Young was notified that the output files are ready whenever he would like to examine them. (Stassi)	
CERESlib Stassi/Ayers		Updated the tsi_type_mod.f90 module for TISA Averaging. (Nguyen, Stassi)	
		Responded to questions from Jim Donaldson concerning the compilation of CERESlib. (Stassi)	
		• Wrote a program to read a LogReport file and calculate time statistics for the items listed within it. (Stassi)	